WHAT IS CLAIMED IS:

1. A system for controlling a V-belt type continuously variable transmission (CVT) for a vehicle, comprising:

a source of a line pressure;

primary and secondary pulleys arranged on input and output sides, the pulleys being subjected to primary-pulley and secondary-pulley pressures produced from the line pressure;

a V-belt looped over the primary and secondary pulleys, the V-belt engaging in V-grooves of the primary and secondary pulleys, the V-grooves being changed in width through a differential pressure between the primary-pulley and secondary-pulley pressures to achieve a target shift ratio of the CVT; and

an electronic control unit (ECU) which controls the line pressure, the ECU being programmed to:

input a first torque signal obtained by estimating an engine torque in accordance with vehicle operating conditions and the target shift ratio;

input a second torque signal obtained by detecting the engine torque;

synthesize the first and second torque signals to provide an estimated-torque signal; and

control the line pressure in accordance with the estimated-torque signal.

2. The system as claimed in claim 1, wherein the ECU is further programmed to set the first torque signal as the estimated-torque signal when the engine torque rises.

3. The system as claimed in claim 1, wherein the ECU is further programmed to:

subject the first torque signal to differential processing and smoothing processing;

determine a sum of the first torque signal as subjected and the second torque signal; and

determine a greater one of the first and second torque signals;

determine a smaller one of the sum and the greater one; and

set the smaller one as the estimated-torque signal.

4. A vehicle, comprising:

a source of a line pressure;

a V-belt type continuously variable transmission (CVT), comprising:

primary and secondary pulleys arranged on input and output sides, the pulleys being subjected to primary-pulley and secondary-pulley pressures produced from the line pressure; and

a V-belt looped over the primary and secondary pulleys, the V-belt engaging in V-grooves of the primary and secondary pulleys, the V-grooves being changed in width through a differential pressure between the primary-pulley and secondary-pulley pressures to achieve a target shift ratio of the CVT; and

an electronic control unit (ECU) which controls the line pressure, the ECU being programmed to:

input a first torque signal obtained by estimating an engine torque in accordance with vehicle operating conditions and the target shift ratio;

input a second torque signal obtained by detecting the engine torque;

synthesize the first and second torque signals to provide an estimated-torque signal; and

control the line pressure in accordance with the estimated-torque signal.

5. The vehicle as claimed in claim 4, wherein the ECU is further programmed to set the first torque signal as the estimated-torque signal when the engine torque rises.

6. The vehicle as claimed in claim 4, wherein the ECU is further programmed to:

subject the first torque signal to differential processing and smoothing processing;

determine a sum of the first torque signal as subjected and the second torque

signal; and

determine a greater one of the first and second torque signals;

determine a smaller one of the sum and the greater one; and

set the smaller one as the estimated-torque signal.

7. A method of controlling a V-belt type continuously variable transmission (CVT) for a vehicle, the CVT comprising:

a source of a line pressure;

primary and secondary pulleys arranged on input and output sides, the pulleys being subjected to primary-pulley and secondary-pulley pressures produced from the line pressure; and

a V-belt looped over the primary and secondary pulleys, the V-belt engaging in V-grooves of the primary and secondary pulleys, the V-grooves being changed in width through a differential pressure between the primary-pulley and secondary-pulley pressures to achieve a target shift ratio of the CVT,

the method comprising:

inputting a first torque signal obtained by estimating an engine torque in accordance with vehicle operating conditions and the target shift ratio;

inputting a second torque signal obtained by detecting the engine torque;

synthesizing the first and second torque signals to provide an estimated-torque signal; and

controlling the line pressure in accordance with the estimated-torque signal.

8. The method as claimed in claim 7, further comprising:

setting the first torque signal as the estimated-torque signal when the engine torque rises.

9. The method as claimed in claim 7, further comprising:

subjecting the first torque signal to differential processing and smoothing

processing;

determining a sum of the first torque signal as subjected and the second torque signal; and

determining a greater one of the first and second torque signals;

determining a smaller one of the sum and the greater one; and

setting the smaller one as the estimated-torque signal.